## ANNUAL REPORT

ON THE

## SANITARY CONDITION

OF THE

# Isle of Axholme Rural District

During the Year 1925.

MR. CHAIRMAN AND GENTLEMEN,

I beg to submit to you my Annual Report on the Sanitary Circumstances, the Sanitary Administration and the Vital Statistics of the District for the year 1925 in accordance with the specified requirements of the Minister of Health, one of which is that the Report for the year under consideration is to be regarded as a Survey Report giving fuller details on various matters than those supplied in the past four years.

## Natural and Social Conditions.

The area of the District excluding water of the extent of 197 acres is 27,873 acres, containing a population, according to the 1921 Census of 6,741 (or 74 less than in 1911). The number of inhabited houses was 1,622 and the number of families or separate occupiers was 1,645.

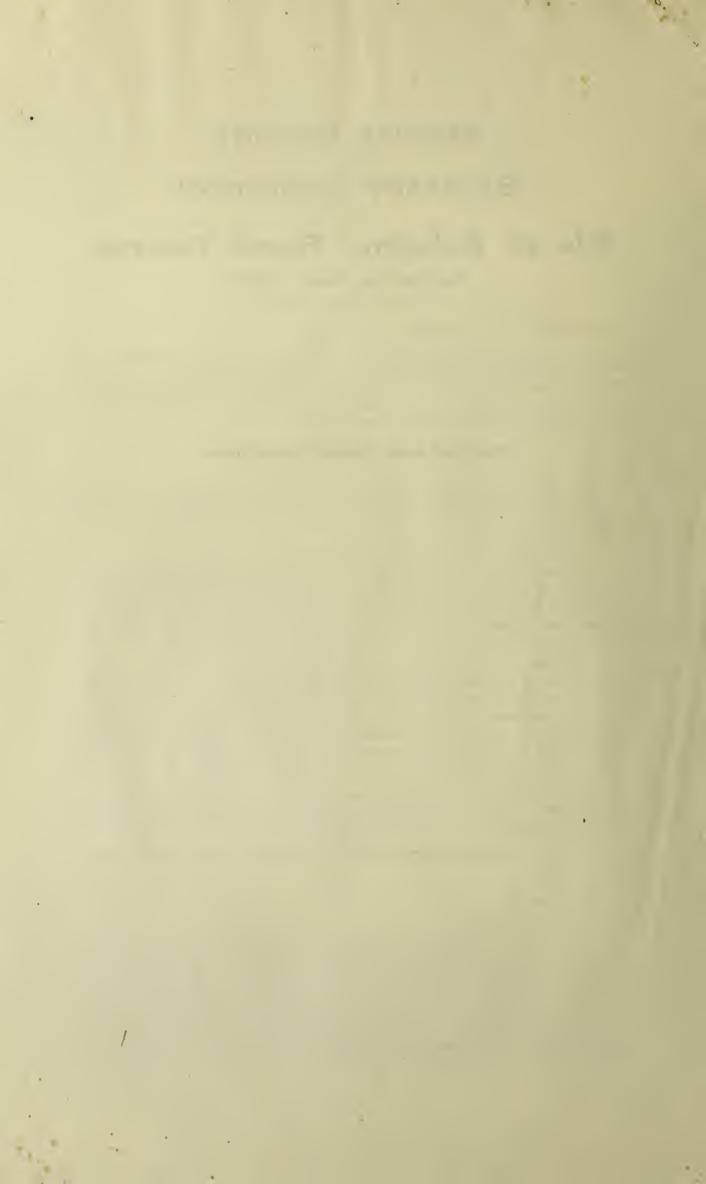
The Registrar General estimates the population for 1925 as 6,867. The latest returns give the Rateable Value as £41,782, Assessable Value as £21,200 and the sum represented by a penny rate £88 6s. 8d. The Assessable Value is the Rateable less three-quarters of the value of agricultural land according to the Agricultural Rates Acts 1896, 1923. There are 9 civil parishes connected with the two Unions of Thorne and Goole, neither of which are in the County of Lincoln, and the Poor Law Relief amounted approximately to £1,500.

The District is, roughly speaking, 12 miles in length and 7 miles from East to West at its widest part. It was in ancient times a swampy waste, but by the work of successive generations of engineers it has been converted into fertile, mostly arable, land. Straight courses have been cut for the streams instead of the old winding channels the course of which may still be traced; drains have been cut for the drainage of the land, and steam pumping engines erected for getting rid of the excess of water in wet weather. The reclaimed land has been enriched by "warping," a process of tidal irrigation with the muddy waters of the Trent.

Geologically the district rests upon the upper division of the triassic rocks—red and blue marls with bands of gypsum. These however are more or less covered up by a series of recent beds which usually lie from above downwards in the following order:—

- 1. Warp, an alluvial clay deposited from the river water by natural or artificial means.
- 2. Peat.
- 3. Sand.
- 4. Strong clay.
- 5. Gravel and sand.

Through these overlying beds the triassic rocks, capped with more recent gravel and sand, rise in the southern part of the district, forming low eminences above the level plain; thus the township of Epworth rises from 15ft. to 80ft. above Ordnance Datum. Four miles to the west, Wroot rises from 15ft. to 30ft., and Belton to the north varies from 15ft. to 40ft. The other villages, Althorpe, Keadby and Amcotts situated on the West bank of the Trent, and Eastoft, Luddington and Garthorpe on the east bank of the old bed of the diverted southern branch of the river Don, which forms the boundary line between Lincolnshire and Yorkshire, rise no higher than 15ft. above sea-level.



The district is traversed from west to east by the Stainforth and Keadby canal, which by connecting the Don and the Trent, conveys a large traffic between the West Riding and the Humber; alongside the canal runs the Great Central Railway, crossing the Trent at Keadby and Althorpe by the recently constructed combined road and railway bridge; in this area also several large and important land drains open into the river, on the bank of which are situated two considerable factories, one for the production of chemical manures and the other for the treatment of vegetable oils. It thus happens that Keadby and Althorpe are yearly assuming to a greater degree the characteristics of a more urban industrial type of community than the rest of the district, where, with the exception of the usual professional and retail commercial residents, the population is mostly agricultural and a considerable number of women work in the fields.

The rainfall is slight; in fact this is the region of the lowest rainfall on the British Isles, as for the last forty years the average annual rainfall on this district works out only at 21'4 inches, and this amount remains fairly constant if the yearly average is taken during the four decennial periods, thus:—

#### Vital Statistics.

Heart Disease accounted for 9 deaths, Bronchitis and Pneumonia for 12, and only 1 child under 2 years of age died from Diarrhœa.

There was one fatal case of Enteric or Typhoid Fever in the person of a young man who was brought home to Eastoft from his place of employment in Yorkshire in an acute stage of the disease to which he subsequently succumbed.

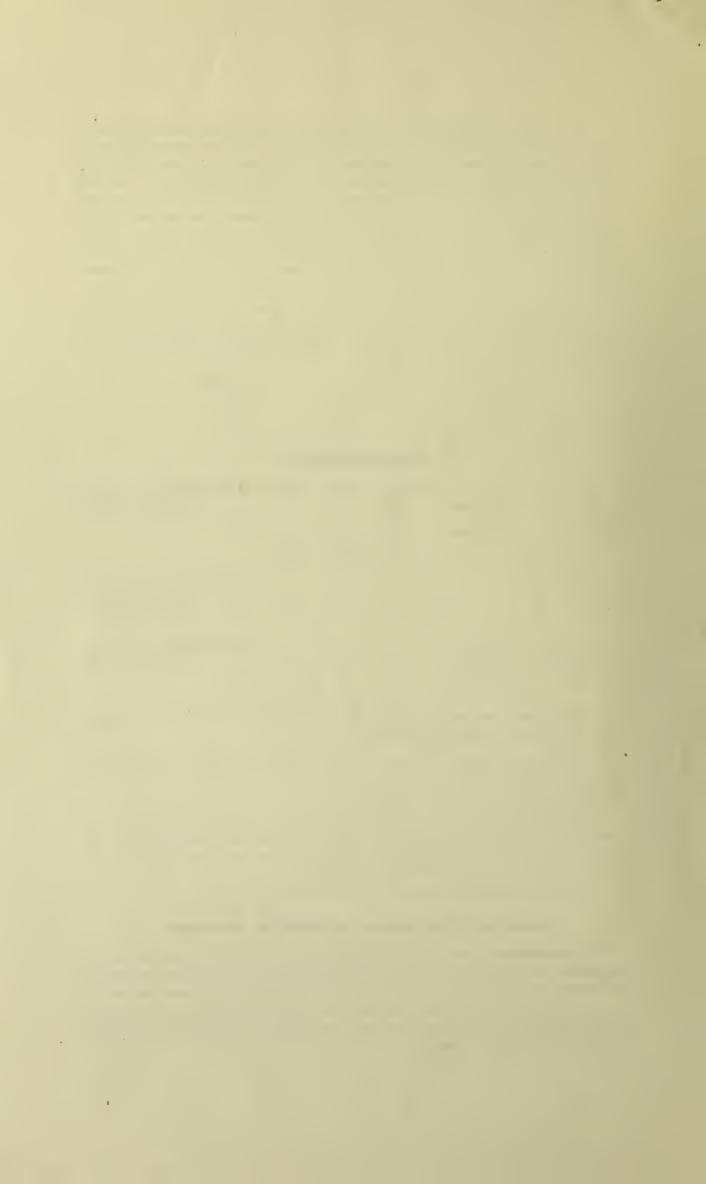
Tuberculosis in all its forms caused 5 deaths, the death rate from this disease for the past 5 years being '56 per 1000 living persons, whereas for England and Wales it was over 1 per 1000. Cancer claimed 9 victims, the death rate from this disease for the past 5 years being 1'2 per 1000, which was equal to that of England and Wales.

There was no death from Measles, Scarlet Fever or Puerperal Fever.

### General Provisions of Health Services.

**Hospitals.**—There is no Isolation Hospital in the District, but, as regards Smallpox arrangements have been made with the Lincoln Corporation to the effect that such patients shall be taken into their Isolation Hospital on specified terms including ambulance facilities.

Beds are reserved at the Dawber Sanatorium and at the Borough Sanitorium, Ipswich. Patients suffering from Pulmonary Tuberculosis are treated, as vacancies arise, at various sanatoria in different parts of England.



In addition to these arrangements Branston Hall, four miles from Lincoln, was purchased by the County Connoil and opened in 1923 as a Sanatorium for early cases of Tuberculosis in women and children. There is accommodation for about 60 patients.

The General Hospitals available for general medical and surgical cases are Lincoln and Doncaster for the most part, in addition to the usual Workhouse Infirmaries of Thorne and Goole.

Clinics.—The Tuberculosis Dispensary, School Clinics, and Maternity and Child Welfare Centre are at Home Street, Scunthorpe. The Venereal Diseases Clinic is at Scunthorpe and during the year 1924 a similar clinic has been established at Bridge Street, Gainsborough, where a male Medical Officer has been appointed for the treatment of males, and a lady Medical Officer for females. All these Clinics are provided and staffed by the County Council.

**Nursing.**—There is a professional nurse who is also a certified midwife at Epworth, supported by the Epworth Nursing Association. The County Council make a grant of 50 per cent of approved expenditure to those District Nursing Associations which undertake midwifery in addition to other County Council services.

The Public Health Officers of the Council consist of the Medical Officer of Health and the Sanitary Inspector, both part-time men, the latter possessing the certificate of the Royal Sanitary Institute, and holding in addition the posts of Highway Surveyor and Petroleum Inspector.

# Adoptive Acts, Byelaws and Regulations in force. Adoptive Acts.

Public Health Acts Amendment Act, 1890, Part 3. Infectious Diseases Prevention Act, 1890, Sec. 4—18.

These Acts were adopted in 1891 by the Rural Sanitary Authority of Thorne Union before the creation of District Councils by the Local Government Act of 1894.

Public Health Acts Amendment Act, 1907, sec. 57.

This was adopted by the Council.

#### Byelaws under Public Health Act, 1875.

Scavenging and Cleansing, under Sec. 44.

Prevention of Nuisances, under Sec. 44.

Regulation of Common Lodging Houses, under Sec. 80.

Regulation of Slaughter Houses, under Sec. 169.

The above Bye-laws were made by the Thorne Union Rural Sanitary Authority in 1883, and subsequently confirmed by the District Council in 1903 with certain alterations and additions.

**Buildings,** under Sec. 157. Made by the Thorne Authority in 1894 and confirmed by the Council in 1903.

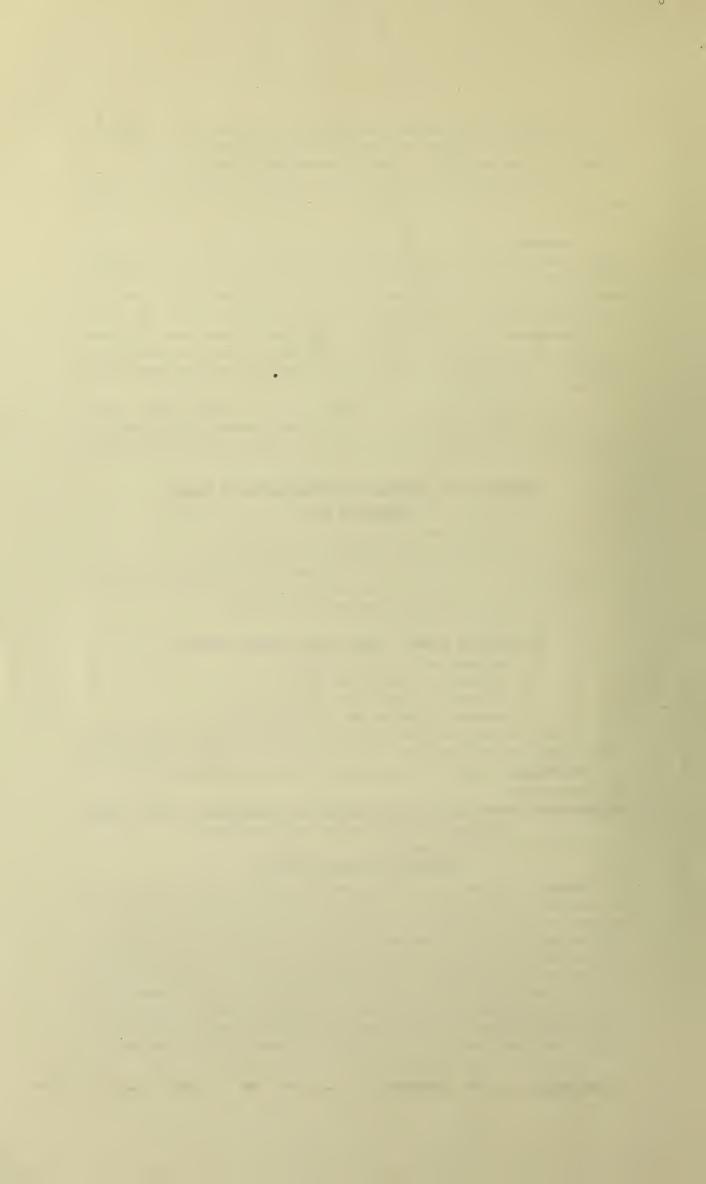
#### Regulations under Dairies, Cowsheds and Milkshops Order, 1885.

Registration of Cowkeepers, etc., under same order.

Put into force by the Council in 1907.

#### Sanitary Circumstances.

**Water.**—The Council for many years past has adhered to the policy of recognizing rain water collected from roofs as the main supply for drinking and dietetic purposes, chiefly for the reason that it is less liable to dangerous contamination than water derived from shallow wells, therefore in plans presented for building new houses, provision in every case has to be shown for the proper construction of underground cisterns with a capacity of 1,000 gallons or more. In the case of old cottages without cisterns, pressure is put upon the owners to provide metal tanks for storage. This official recognition of rain water, however, does not always coincide with the tastes and habits of villages situated on differing geological strata; thus while Epworth and a considerable part of Belton, lying on the high gypsum ground of the Isle of Axholme, instinctively avoid for human purposes the subterranean water on account of its extreme permanent hardness, on the other hand



villages in the North of the District, Althorpe, Keadby and Amcotts on the Trentside, Garthorpe, Luddington and Eastoft on the bank of the old course of the obliterated river Don, all lying on an unplumbed thickness of warp, peat and sand, have no inherent objection to water derived from wells which have never been sunk below the peat and alluvial deposits. The village of Wroot in the South West of the District, situated on a little hillock of magnesian limestone, and having therefore an underground water of considerably less permanent had dness than Epworth and Belton, drinks wellwater, I understand, to some extent.

**Rivers and Streams.**—The Trent being a tidal river in this neighbourhood is for all practical purposes outside the legislation of the Rivers Pollution Act, but it receives a good deal of crude sewage from Thorne by way of the North Soak Drain at Keadby.

**Drainage and Sewerage.**—There is no regular system of drainage in any of the parishes, although most of them have sanitary pipes underground leading to the dykes and ditches beyond the houses in the open country, but private drainage is not in the majority of cases connected up with these public sewers. All public open dykes are cleaned out yearly, and in the case of underground sewers, the manholes and inspection chambers are regularly kept in order.

**Closet Accommodation.**—There are about a dozen water-closets in the district discharging into cesspools; a small proportion of the rest of the closets are earth-pail closets (10 or 12 per cent.); the rest are privy middens.

**Scavenging.**—There is no public scaverger in any part of the district, the removal and disposal of house refuse, and the cleansing of earth-pail closets, privies, etc., being carried out by the tenants, but in some cases by the landlord when he owns several contiguous houses.

**Sanitary Inspection.**—Mr. West, the Sanitary Inspector, who is also Inspector under Article 2 of the Inspection of District (Housing) Regulations, and who resigned all his posts under the Council on December 31st, reports as follows:—

#### Nuisances.

Total abated by informal actio	 •••	46		
" statutory notic	" statutory notice		 	3
Accumulation of refuse remove	 •••	14		
Foul ditches cleaned out			 	7
Dampness remedied		 	3	
Yards repaired	•••		 	2
Other nuisances dealt with			 	23
Total number of inspections ar	 •••	578		

**Common Lodging House.**—One in district at Epworth. Five inspections made. Kept in good order, but privies required cleansing on two occasions.

**Slaughterhouses.**—11 Registered or Licensed. 37 inspections have been made. All generally kept in good order, clean and limewashed twice a year.

Inspection at the time of slaughter is arranged for and made in accordance with the Public Health (Meat) Regulations, 1924, and some progress has been made in the matter of keeping the meat in shops and vehicles cool and clean.

Number of private slaughterhouses—

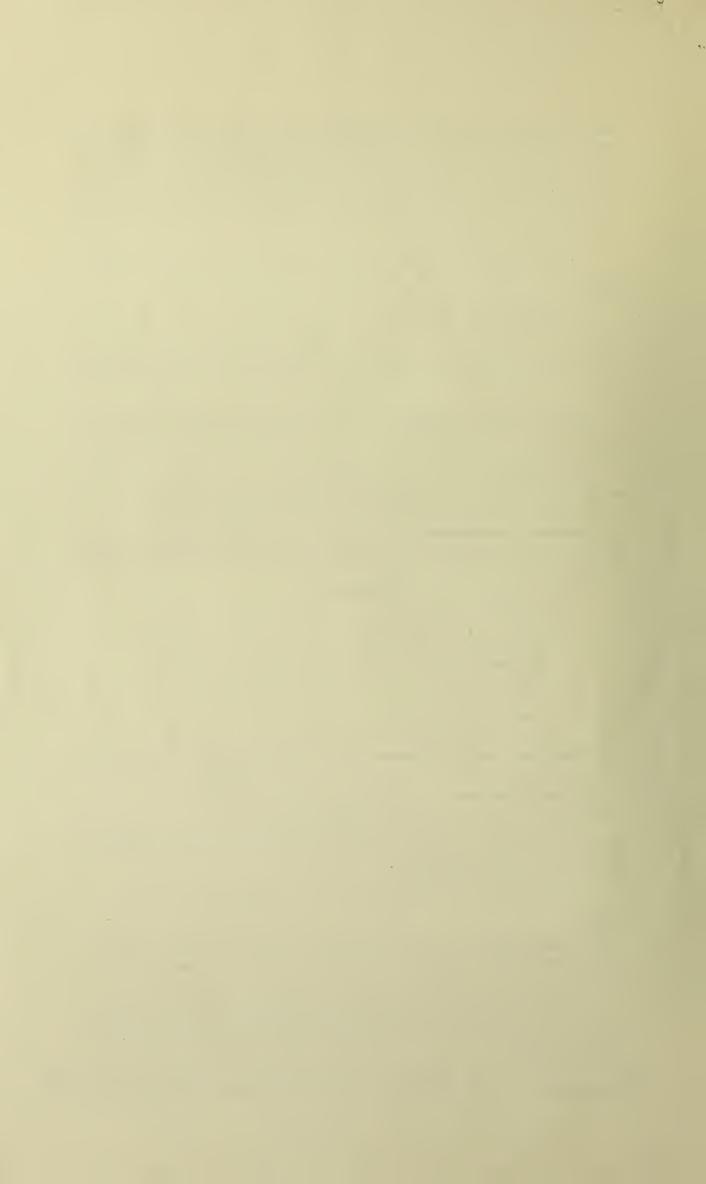
In 1920. In January, 1925. In December, 1925.

Registered 13 10 11

Milk Supply.—14 Cowsheds on Register. 28 Inspections made. 3 requests to clean down and whitewash were readily complied with. No licences have been granted for the sale of milk under special designations.

Generally speaking the milk is good and wholesome, and the supply is up to the demand. There are no milkshops, and no tuberculous employees are known to be engaged in the milk trade. Milk is not imported into the District, and only one farmer sends milk away to a neighbouring town.

BAKEHOUSES. 2 at Epworth. 5 inspections. Kept in good order.



#### Notifiable Diseases (other than Tuberculosis) in 1925.

Diseases.	Case	s Notifie	ed.	Admitted to Hospital.	Deaths
Smallpox		0		_	
Scarlet Fever		4	•••	_	_
Diphtheria		1		_	
Enteric Fever		1		—	1
Puerperal Fev	er	0			_
Pneumonia		11			3
Erysipelas		1	•••	_	_
Encephalitis I	Letharg	ica 1			_
		_			_
Total		19		0	4

#### Prevalence of Infectious Diseases, 1921—1925.

During these 5 years there have occured sporadic cases of Scarlet Fever, but no sustained epidemic.

There have been two outbreaks of Diphtheria in epidemic form amongst school children, the first at Althorpe and Keadby in 1921, which had a prolonged life owing to the general pollution of the air engendered by the particularly hot and dusty summer when the rainfall on this district from January to the end of September only amounted to 9'6 inches.

The second outbreak occurred in 1923 at Epworth amongst children in the third and fourth standards in the Council School; in this case the original infection was undoubtedly spread by insanitary methods of dusting and sweeping, and by an inexcusable return to the obsolete custom of using slates. No deaths in either outbreak. In 1922, 1923 and 1924 there were six cases of Encephalitis Lethargica (sleepy sickness) scattered about the district without any apparent connecting links between them. Two of these young people died; and in the same three years there occurred two cases of Typhoid Fever, widely separated from one another in different parishes. Both made good recoveries.

In the matter of the above mentioned and certain other diseases, liquid disinfectants are supplied during the course of the illness, and after convalescence the rooms are fumigated with formalin; school interiors are sprayed with Cyllin, in addition to being subjected to aerial disinfection, and the action taken in relation to the health of the scholars and for preventing the spread of infectious disease closely follows the practice indicated in the Ministry's latest memorandum on Closure of and Exclusion from School.

The early use of Diphtheria Antitoxin is the general custom, and its free provision is made by the Council in accordance with the 1910 Order.

#### Tuberculosis.

New Cases and and Mortality during 1925.

				~					
NEW CASES.						DEATHS.			
Age Periods.	ods. Pulmonary.		Non Pulmonary.		Pulmonary.		Non Pulmonary.		
	M	F	M	F	$\mathbf{M}$	F	M	F	
2025	3		_		_	_	_	_	
35—45	1		1		3		_		
45—55	_	1	_	_	2	_	_		
Totals	4	. 1	1	0	5	0	0	0	

Of these 5 people who died from Consumption 3 only had been notified during life as suffering from that disease,—a deficiency in notification to the extent of 40 per cent.

**Factory and Workshops Act.**—There are 55 Workshops and workplaces and 12 Factories on the Register. No particular fault can be found as regards cleanliness, ventilation and sufficiency of air-space.

(5)

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#### Housing.

There is a demand for further accommodation in all the parishes, as in several cases young married couples are living with their parents on account of the difficulty of obtaining cottages. The influx of workers to the rapidly developing ironstone area in the Scunthorpe neighbourhood has led to some cases of overcrowding, especially at Althorpe and Keadby, owing to persons taking in lodgers, and undoubtedly during the past five years empty houses have been taken by these workers who offered and were able to pay a much higher rent than the property realised before and the local people could afford. The fact that the average number of persons in each house is 4, does not point to any serious overcrowding in the mass, but there are certainly isolated instances to be found of large families occupying disproportionately small dwellings with inadequate sleeping quarters.

#### HOUSING STATISTICS FOR THE YEAR 1925.

	Number of new houses erected during the year:—	
	(a) Total	4
	(b) With State assistance under the Housing Acts	Nil
1.	Unfit dwelling-houses.	
	Inspection—(1) Total number of dwelling-houses inspected for housing defects (under	
	Public Health or Housing Acts	198
	(2) Number of dwelling-houses which were inspected and recorded under the	
	Housing (Inspection of District) Regulations, 1910, or the Housing Con-	
	solidated Regulations, 1925	18
	(3) Number of dwelling-houses found to be in a state so dangerous or injurious	
	to health as to be unfit for human habitation	0
	(4) Number of dwelling-houses (exclusive of those referred to under the pre-	
	ceding sub-head) found not to be in all respects reasonably fit for human	
	habitation	16
2.	Remedy of defects without Service of Formal Notices.	
	Number of defective dwelling-houses rendered fit in consequence of informal action	
	by the Local Authority or their officers	14
3.	Action under Statutory Powers.	
	A.—Proceedings under section 3 of the Housing Act, 1925	0
	B.—Proceedings under Public Health Acts.	
	(1) Number of dwelling-houses in respect of which notices were served	
	requiring defects to be remedied	18
	(2) Number of dwelling-houses in which defects were remedied after	
	service of formal notices:—	
	(a) By owners	14
	(b) By Local Authority in default of owners	0
	C.—Proceedings under sections 11, 14 and 15 of the Housing Act, 1925	0
	I have the honour to remain, gentlemen,	
	Yours faithfully,	
	•	

April, 1926.

ARTHUR F. MESSITER.

